



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/797,530	03/10/2004	Scott Lynn Michaelis	200313407-1	4525

22879 7590 08/23/2007
HEWLETT PACKARD COMPANY
P O BOX 272400, 3404 E. HARMONY ROAD
INTELLECTUAL PROPERTY ADMINISTRATION
FORT COLLINS, CO 80527-2400

EXAMINER

PATEL, NITIN C

ART UNIT	PAPER NUMBER
----------	--------------

2116

MAIL DATE	DELIVERY MODE
-----------	---------------

08/23/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/797,530

Applicant(s)

MICHAELIS ET AL.

Examiner

Nitin C. Patel

Art Unit

2116

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 June 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18, and 20 -36 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-18, and 20 -36 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application
- ☐ Other: _____

DETAILED ACTION

1. This is in responsive to amendment filed on 20 June 2007.
2. Claim 19 has been cancelled.
3. Claims 1 – 18 and 20 – 36 are currently pending with the application.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1 – 3, 9 – 10, and 30 – 33, are rejected under 35 U.S.C. 102(e) as being clearly anticipated by Foster et al. [hereinafter as Foster], U. S. Patent 7,065,761 B2.
5. As to claim 1, Foster teaches a method of managing configuration data for a multi-cell computer system [10][col. 1, lines 34 – 53, col. 2, lines 9 – 23, fig. 1], the method comprising:
 - a. storing configuration data [configuration information] for a given multi-cell computer system [given partition as per definition of specification para 0023] to nonvolatile memory [14 NVRAM] of at least one cell of said given multi-cell computer system [col. 1, lines 34 – 53, col. 2, lines 44 – 52,]; and

b. storing a corresponding identifier [ID] to said nonvolatile memory [14 NVRAM] of said at least one cell that uniquely identifies the given multi-cell computer system to which the stored configuration data corresponds [col. 2, lines 55 – 63, fig. 1].

6. As to claim 30, Foster teaches a system [10, col. 1, lines 34 – 53, col. 2, lines 9 – 23, fig. 1] comprising:

a. a plurality of cells in a multi-cell system, wherein multiple ones of said cells include non-volatile memory to which are stored configuration data [col. 1, lines 34 – 53, col. 2, lines 44 – 52,] and a corresponding identifier that uniquely identifies a given multi-cell partition to which the cell's respective stored configuration data corresponds [col. 2, lines 55 – 63, fig. 1].

7. As to claim 2, Foster teaches storing said configuration data to said at least one cell during a first boot up process of said given multi-cell computer system [when system is first booted] [col. 3, lines 16 – 35].

8. As to claim 3, Foster teaches storing a corresponding identifier comprises: storing said identifier that uniquely identifies that said at least one cell received said stored configuration data while a member of said given multi-cell computer system [col. 2, lines 55 – 63, col. 3, lines 1 – 3].

9. As to claim 9, Foster teaches given multi-cell computer system is a partition of a multi-cell computer system, said partition having a plurality of the cells of said multi-cell computer system [col. 2, lines 8 – 20, fig. 1].

10. As to claim 10, Foster teaches configuration data comprises at least one item selected from the group consisting of information identifying a boot path for said given

Art Unit: 2116

multi-cell computer system [col. 1, lines 50 – 53, col. 3, lines 30 – 32], information identifying a device to use as a system console for said given multi-cell computer system [col. 1, lines 41 – 43], information identifying any tests to run when booting up the given multi-cell computer system, and information identifying resources of said given multi-cell computer system [col. 1, lines 41 – 43, col. 2, lines 34 – 36].

11. As to claim 31, Foster teaches the system [fig. 1] wherein at least one cell of said multi-cell system is operable to determine [by comparing] whether its stored identifier matches a unique identifier of said multi-cell system [col. 21, lines 6 – 13].

12. As to claim 32, Foster teaches the system [fig. 1] wherein if said at least one cell determines that its stored identifier matches said unique identifier of said multi-cell system, then said at least one cell is operable to identify its corresponding stored configuration data as the proper configuration data for configuring said multi-cell system [if two ID's are not identical, the operation is ignored by processor which indirectly teaches when both IDs are equal proper configuration data for configuring][col. 21, lines 6 – 35].

13. As to claim 33, Foster teaches the system [fig. 1] wherein each of said cells include non-volatile memory [NVRAM] to which are stored configuration data and a corresponding identifier that uniquely identifies a given multi-cell partition to which the cell's respective stored configuration data corresponds [col. 1, lines 34 – 53, col. 2, lines 44 – 52, lines 55 – 63, fig. 1].

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

14. Claims 1 – 18, 20 – 28, and 30 – 36 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Doing et al. [hereinafter as Doing], US Patent 6,438,671 B1.

15. As to claim 1, Doing teaches a method of managing configuration data for a multi-cell computer system [col. 10, lines 17 – 51, fig. 1], the method comprising:

a. storing configuration data [configuration information] for a given multi-cell computer system [given partition as per definition of specification para 0023] to nonvolatile memory [special purpose registers] of at least one cell of said given multi-cell computer system [col. 11, lines 28 – 29]; and

b. storing a corresponding identifier [ID] to said nonvolatile memory [special purpose registers] of said at least one cell that uniquely identifies the given multi-cell computer system to which the stored configuration data corresponds [col. 13, lines 2 – 7, fig. 9].

16. As to claim 11, Doing teaches a method of managing configuration data locally within a partition of a multi-cell computer system [col. 10, lines 17 – 51, fig. 1]

comprising:

a. determining a unique identifier for a given partition of the multi-cell computer system;

b. determining if at least one cell in said given partition has an identifier stored to its respective nonvolatile memory that matches said determined unique identifier for said given partition; and

b. if determined that at least one cell of said given partition has a stored identifier matching said determined unique identifier for said given partition by comparing LPID in tag with LPID in configuration register], using configuration data stored to that cell's nonvolatile memory for configuring the given partition [col. 21, lines 6 – 35].

17. As to claim 16, Doing teaches method comprising:

a. storing configuration data for a multi-cell computer system locally to nonvolatile memory of each of a plurality of cells [col. 11, lines 28 – 29, col. 12, lines 46 - 55], wherein said storing configuration data comprises storing corresponding identifier data [ID] that uniquely identifies a multi-cell system to which the configuration data corresponds [col. 13, lines 2 – 7, fig. 9];

b. implementing the plurality of cells in a given multi-cell system [col. 10, lines 17 – 51]; and

c. determining [by storage control unit] if any of said cells possess the proper configuration data corresponding to the given multi-cell system [col. 5, lines 57 – 67, col. 12, lines 55 – 67, col. 13, lines 1 – 25, col. 21, lines 6 – 35].

18. As to claim 23, Doing teaches a method of managing configuration data for a multi-cell system having a plurality of cells under the control of a common operating system, the method comprising:

Art Unit: 2116

a. during a boot-up process of the multi-cell system, a first cell determining whether it has stored in its non-volatile memory current configuration data for the multi-cell system;

b. if determined that the first cell has the current configuration data, the first cell providing this stored configuration data to other cells of said multi-cell system and using this stored configuration data for configuring the multi-cell system; and

c. if determined that the first cell does not have the current configuration data, determining if any cell of said multi-cell system has stored in its nonvolatile memory the current configuration data for the system, and if determined that a cell of said multi-cell system has said current configuration data, then providing this configuration data to other of said cells of said multi-cell system and using this stored configuration data for configuring the multi-cell system.

19. As to claim 26, Doing teaches a method comprising:

a. during a first boot-up process [initialization] of a multi-cell partition, distributing configuration data for the multi-cell partition to each of the cells of said multi-cell partition, wherein the configuration data is stored to non-volatile memory in each of the cells [col. 11, lines 28 – 29, col. 12, lines 55 - 57], and storing to said non-volatile memory of each cell a corresponding identifier that identifies that the configuration data corresponds to said multi-cell partition [col. 13, lines 2 – 7, fig. 9]; and

b. during a second boot-up process of said multi-cell partition, a first one of the cells included therein determining whether a unique identifier for the multi-cell partition matches with the first cell's stored identifier, wherein if the first cell's stored

Art Unit: 2116

identifier matches the unique identifier of the multi-cell partition, then determining that the configuration data stored to non-volatile memory of said first cell is the current configuration data for configuring the multi-cell partition [col. 21, lines 7 – 35].

20. As to claim 30, Doing teaches a system [col. 10, lines 17 – 51, fig. 1] comprising:

a. a plurality of cells in a multi-cell system, wherein multiple ones of said cells include non-volatile memory to which are stored configuration data [col. 11, lines 28 – 29] and a corresponding identifier that uniquely identifies a given multi-cell partition to which the cell's respective stored configuration data corresponds [col. 13, lines 2 – 7, fig. 9].

21. As to claim 34, Doing teaches a system [col. 10, lines 17 – 51, fig. 1] comprising: non-volatile storage means, on each of a plurality of cells of a particular multi-cell partition, for storing configuration data [col. 11, lines 28 – 29]; non-volatile storage means, on each of said plurality of cells, for storing an identifier that uniquely identifies a multi-cell system to which the cell's respective stored configuration data relates [col. 13, lines 2 – 7, fig. 9]; and means, on at least one of said plurality of cells, for determining if said configuration data stored to any of said plurality of cells relates to said particular multi-cell partition [col. 5, lines 57 – 67, col. 12, lines 55 – 67, col. 13, lines 1 – 25, 46 – 67, col. 21, lines 6 – 35].

22. As to claim 2, Doing teaches storing said configuration data to said at least one cell [configuration registers set] during a first boot up process [initial installation] of said given multi-cell computer system [initial installation of system i.e. first booted] [col. 12, lines 49 – 67].

Art Unit: 2116

23. As to claim 3, Doing teaches storing a corresponding identifier comprises: storing said identifier that uniquely identifies that said at least one cell received said stored configuration data while a member of said given multi-cell computer system [col. 13, lines 4 – 7].

24. As to claim 4, Doing teaches determining during a second boot-up process of said given multi-cell computer system a unique identifier of said given multi-cell computer system; and determining whether the unique identifier stored to any of said at least one cell matches the determined unique identifier of said given multi-cell computer system [col. 5, lines 57 – 67, col. 12, lines 55 – 67, col. 13, lines 1 – 25, 46 – 67, col. 21, lines 6 – 35].

25. As to claim 5, Doing teaches if determined that at least one cell's stored identifier matches the determined unique identifier of said given multi-cell computer system, then determining that such cell's stored configuration data is current for the given multi-cell computer system [col. 5, lines 57 – 67, col. 12, lines 55 – 67, col. 13, lines 1 – 25, col. 21, lines 6 – 35].

26. As to claim 6, Doing teaches if determined that at least one cell's stored configuration data is current, using the determined current configuration data for configuring the given multi-cell computer system [col. 21, lines 6 – 35].

27. As to claim 7, Doing teaches if determined that at least one cell's stored configuration data is current, storing the determined current configuration data for the given multi-cell computer system to other cells of said given multi-cell computer system [col. 21, lines 6 – 35].

Art Unit: 2116

28. As to claim 8, Doing teaches if determined that at least one cell's stored configuration data is current, updating the other cells' stored identifier to match the determined unique identifier of said given multi-cell computer system [col. 21, lines 6 – 35].

29. As to claim 9, Doing teaches given multi-cell computer system is a partition of a multi-cell computer system, said partition having a plurality of the cells of said multi-cell computer system [col. 10, lines 46 – 51, fig.1].

30. As to claim 10, Doing teaches configuration data comprises at least one item selected from the group consisting of information identifying a boot path for said given multi-cell computer system [col. 12, lines 55 – 65], information identifying a device to use as a system console for said given multi-cell computer system, information identifying any tests to run when booting up the given multi-cell computer system [col. 13, lines 2 – 7], and information identifying resources of said given multi-cell computer system [col. 10, lines 46 – 51].

31. As to claim 12, Doing teaches at least one cell of said given partition comprises configuration data stored to its respective nonvolatile memory that is not proper configuration data [when two lds are not identical] for configuring the given partition [col. 21, lines 6 – 35].

32. As to claim 13, Doing teaches information identifying a boot path for said given partition, information identifying a device to use as a system console for said given partition, information identifying any tests to run when booting up the given partition, and

Art Unit: 2116

information identifying resources of said given partition [col. 5, lines 57 – 67, col. 12, lines 55 – 67, col. 13, lines 1 – 25, col. 21, lines 6 – 35].

33. As to claim 14, Doing teaches if determined that at least one cell of said given partition has a stored identifier matching said determined unique identifier for said given partition, storing the configuration data of said at least one cell whose stored identifier matches said determined unique identifier to nonvolatile memory of other cells of said given partition [col. 21, lines 6 – 35].

34. As to claim 15, Doing teaches storing an identifier that matches the determined unique identifier of said given partition to said nonvolatile memory of said other cells [col. 5, lines 57 – 67, col. 12, lines 46 – 67, col. 13, lines 1 – 25, col. 21, lines 6 – 35].

35. As to claim 17, Doing teaches determining comprises: said given multi-cell system autonomously determining [by comparing] if any of said cells possess the proper configuration data [col. 21, lines 6 – 13].

36. As to claim 18, Doing teaches determining comprises: calculating a unique identifier of said given multi-cell system; and determining if a stored identifier in said nonvolatile memory of any one of said plurality of cells matches the calculated unique identifier [col. 11, lines 24 – 67, col. 12, lines 1 – 67, col. 13, lines 1 – 7].

37. As to claim 20, Doing teaches storing configuration data for a first multi-cell system to a first one of said plurality of cells; and storing configuration data for a second multi-cell system to a second one of said plurality of cells [col. 11, lines 11 – 20].

38. As to claim 21, Doing teaches multi-cell system is a partition of a computer system [col. 10, lines 17 – 51, fig.1].

Art Unit: 2116

39. As to claim 22, Doing teaches storing said configuration data for said partition to a utility processor [service processor] that is external to said partition [col. 12, lines 55 – 57].

40. As to claim 24, Doing teaches determining whether an identifier stored to said first cell's non-volatile memory matches a unique identifier of the multi-cell system [col. 21, lines 6 – 35].

41. As to claim 25, Doing teaches multi-cell system is a partition having said plurality of cells under the control of a common operating system [col. 10, lines 17 – 51, fig.1].

42. As to claim 27, Doing teaches replacing said first one of the cells with a different cell having different configuration data stored to its respective non-volatile memory; and said different cell determining during said second boot-up process that its stored identifier does not match the unique identifier for the multi-cell partition.

43. As to claim 28, Doing teaches first one of the cells [service processor] is a designated root cell of the partition [col. 12, lines 55 – 57].

44. As to claim 31, Doing teaches at least one cell of said multi-cell system is operable to determine [by comparing] whether its stored identifier matches a unique identifier of said multi-cell system [col. 21, lines 6 – 13].

45. As to claim 32, Doing teaches if said at least one cell determines that its stored identifier matches said unique identifier of said multi-cell system, then said at least one cell is operable to identify its corresponding stored configuration data as the proper configuration data for configuring said multi-cell system [col. 5, lines 57 – 67, col. 12, lines 46 – 67, col. 13, lines 1 – 25, col. 21, lines 6 – 35].

Art Unit: 2116

46. As to claim 33, Doing teaches each of said cells include non-volatile memory [special purpose registers] to which are stored configuration data [col. 11, lines 28 – 29, col. 12, lines 46 – 58] and a corresponding identifier that uniquely identifies a given multi-cell partition to which the cell's respective stored configuration data corresponds [col. 13, lines 4 – 7].

47. As to claim 35, Doing teaches means for determining [by comparing] whether a unique identifier of said particular multi-cell partition matches said at least one cell's stored identifier [col. 21, lines 6 – 35].

48. As to claim 36, Doing teaches means for using the configuration data of a cell determined to have a stored identifier that matches said unique identifier of said particular multi-cell partition for configuring the particular multi-cell partition [col. 21, lines 6 – 35].

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.

Art Unit: 2116

4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

49. Claim 29 is rejected under 35 U.S.C. 103(a) as being unpatentable over Doing et al. [hereinafter as Doing], US Patent 6,438,671 B1 as applied to claims 1 – 28 and 30 – 36 above, and further in view of Rhee et al. [hereinafter as Rhee], U. S. Patent 6,457,008 B1.

50. As to claim 29, Doing does not teach explicitly a round-robin approach is utilized within the multi-cell partition such that if said first cell does not have a stored identifier matching the unique identifier of the multi-cell partition, a second cell of said multi-cell partition determines whether it has a stored identifier matching the unique identifier of the multi-cell partition.

Rhee teaches resource scheduler for allocating a computer system resource including a policy module in which processor time is partitioned among the same classes according to a round-robin policy [col. 13, lines 8 – 42].

It would have been obvious to one of ordinary skill in art, having the teachings of Doing and Rhee before him at the time of invention was made, to modify a logical partitioning of computer system and method as disclosed by Doing to include a round-robin approach as taught by Rhee in order to obtain a configuration module to allocate resources according to scheme used by the operating system including round-robin priority [col. 13, lines 37 – 42].

One of ordinary skill in the art wanted to be motivated to include a round-robin approach to obtain configuration module that can allocate resources according to round-

Art Unit: 2116

robin priority scheme used by operating system in the event of fail any plan or policy
[col. 13, lines 37 – 42].

51. **Examiner's note:** Examiner has cited particular columns and line numbers in the references as applied to the claims above for the convenience of the applicant.

Although the specified citations are representative of the teachings of the art and are applied to the specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested from the applicant in preparing responses, to fully consider the references in entirety as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior art or disclosed by the Examiner.

52. **Prior Art not relied upon:** Please refer to the references listed in attached PTO-892, which, are not relied upon for claim rejection since these references are relevant to the claimed invention.

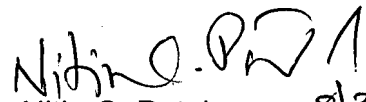
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nitin C. Patel whose telephone number is 571-272-3675. The examiner can normally be reached on 6:30 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rehana Perveen can be reached on 571-272-3676. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2116

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


Nitin C. Patel
Patent Examiner
Technology Center 2100

8/29/07